



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,545	09/10/2003	Seung-Gyun Bae	45703	3251

7590 04/29/2009
Peter L. Kendall
Roylance, Abrams, Berdo & Goodman, L.L.P.
Suite 600
1300 19th Street, N.W.
Washington, DC 20036

EXAMINER

MENDOZA, JUNIOR O

ART UNIT	PAPER NUMBER
----------	--------------

2423

MAIL DATE	DELIVERY MODE
-----------	---------------

04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/658,545	Applicant(s) BAE ET AL.	
	Examiner JUNIOR O. MENDOZA	Art Unit 2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/11/2009 have been fully considered but they are not persuasive.

Regarding **claims 1, 8, 13, 14 and 15**, applicant argues that Jang, Yamaguchi, Kida and Hassell do not teach “a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder”.

However, the examiner respectfully disagrees with the applicant. Jang discloses a cell phone device which is capable of displaying a television signal and a received message simultaneously; moreover, said device utilizes a received and processed synchronous signal (SYNC) which is implemented in order to superimpose a received message on a display, as clearly stated on page 11 lines 17-26 and page 12 lines 1-17. Furthermore, it is well known to include a sync signal in television video signals in order to allow receiver decoders to figure out the way video frames should be presented to a viewer. On the other hand, Yamaguchi further recites the teaching of resizing a received picture information (33a and 33b) in order to accommodate the display of a message information (33c) when the portable device displays a video signal and a message, simultaneously (As admitted by applicant on previous response to office action, page 11 second paragraph), see figures 4A and 4B. Therefore, the combination of Jang, Yamaguchi, Kida and Hassell, and more specifically Jang in view of

Yamaguchi clearly disclose "a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder".

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 13 and 14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "... said synchronous signal ..." in section "c" of the filed amended claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "... said synchronous signal ..." in section "c" of the filed amended claim. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. **Claims 15 and 16** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/658208. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 15 and 16 claim the same features recited in claim 1 in copending application 10/658208. That is, claims 15 and 16 are generic to all that is claimed on claim 1 of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 2, 8, 9, 13, 15 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jae-Huk Jang (UK Patent Application 2,347,588) in view of Yamaguchi (Pub No US 2007/0206518) further in view of Kida et al. (Patent No US 6,335,728) further in view of Hassell et al (Pub No US 2004/0107439). Hereinafter, referenced as Jang, Yamaguchi, Kida and Hassell, respectively.

Regarding **claim 1**, Jang discloses a display apparatus for a mobile terminal for displaying a television video signal in the mobile terminal, comprising:

control means for generating a plurality of commands for execution of a television mode and a communication mode (Page 5 lines 18-22);

a tuner for receiving a television signal of a selected channel (Page 10 lines 1-6 also exhibited on fig 1);

a decoder for decoding the television signal received by said tuner to separate it into said television video signal, an audio signal and synchronous signals (Page 11 lines 12-16 also exhibited on fig 1);

video processing means for, in said television mode, converting said video signal from said decoder into digital video data (Page 12 lines 22-25);

and, in said communication mode, stopping operations of said tuner and decoder (Page 10 lines 3-5) and outputting second user data generated in said communication mode from said control means (Page 7 lines 1-12; where the second user data is the text message);

However, it is noted that Jang fails to disclose a first user data corresponding to a picture being displayed and then outputting said first user data; a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder; a display means having first display area, said display means displaying said frame video data from said video processing means in said first display area in said television mode; a display means having second display area, said second display area displaying said first user data from said video processing means in said second display area and displaying said user data from said video processing means in said first and second display areas in said communication mode.

Nevertheless, in a similar field of endeavor Yamaguchi discloses a first user data corresponding to a picture being displayed and then outputting said first user data (Figures 4A and 4B; reception signal strength);

a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder (Figures 4A and 4B, video image 33a is displayed on a cell phone screen where the video is formatted to fit

Art Unit: 2423

on the display; moreover, the video image once again changes in size when a text message is received in order to show it to the viewer);

a display means having first display area, said display means displaying said frame video data from said video processing means in said first display area in said television mode (Figure 4A, where the first display area corresponds to the video image section 33a)

a display means having second display area, said second display area displaying said first user data from said video processing means in said second display area (Figure 4A, the second display area corresponds to the top portion showing a battery level and reception signal strength which represent the first user data)

and displaying said user data from said video processing means in said first and second display areas in said communication mode (Figure 4B, text message represents the second user data; which modifies the other display areas in order to be displayed on the screen).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, for the purpose of allowing the user to be able to see different types of data simultaneously, which is more efficient and convenient for the user.

However, it is noted that Jang and Yamaguchi fail to disclose processing and storing a digital video data on a frame basis and outputting stored video data of a previous frame in a frame period.

Nevertheless, in a similar field of endeavor Kida discloses processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period (Col. 7 lines 3-57 also exhibited on figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose outputting video data of a previous frame and then outputting said first user data.

Nevertheless, in a similar field of endeavor Hassell discloses outputting video data of a previous frame and then outputting said first user data (Paragraphs [0098] [0099] also exhibited on figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of implementing an efficient and easy to navigate interface which informs users about the content being watched.

Regarding **claim 2**, Jang Yamaguchi, Kida and Hassell disclose the display apparatus as set forth in claim 1; moreover, Jang discloses that said video processing means includes: an analog/digital (A/D) converter for converting said video signal from said decoder into said digital video data (Page 12 lines 22-25 also exhibited on fig 1);

first memory (Page 11 lines 17-26; Page 14 lines 24-27; Page 15 lines 19-21) and a memory controller for (Page 5 lines 18-22), in said television mode, storing video data and outputting said video data and repeating these storage and output operations (Page 19 lines 13-25; page 12 lines 18-27 timing control section),

and in said communication mode storing said second user data in said first memory and/or second memory and outputting the stored said second user data (Page 14 lines 24-27).

However, it is noted that Jang fails to disclose a format scaler.

Nevertheless, in a similar field of endeavor Yamaguchi discloses a format scaler (Figures 4A and 4B, video image 33a is displayed on a cell phone screen where the video is formatted to fit on the display; moreover, the video image once again changes in size when a text message is received in order to show it to the viewer)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, for the purpose of changing the size of the video display area which allows other information to be display instantaneously with the video image.

Art Unit: 2423

However, it is noted that Jang and Yamaguchi fail to disclose a second and third memory; storing video data of a current frame in second or third memory at the same time as outputting video data of a previous frame stored in said third or second memory.

Nevertheless, in a similar field of endeavor Kida discloses a second and third memory (Figure 3, frame memories 24A and 24B);

storing video data of a current frame in second or third memory at the same time as outputting video data of a previous frame stored in said third or second memory (Col. 7 lines 3-57 figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose outputting first user data stored in said first memory upon completing the output of said video data of said previous frame.

Nevertheless, in a similar field of endeavor Hassell discloses outputting first user data stored in said first memory upon completing the output of said video data of said previous frame (Paragraphs [0098] [0099] also exhibited on figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of

Art Unit: 2423

implementing an efficient and easy to navigate interface which informs users about the content being watched.

Regarding **claim 8**, Jang discloses a method for displaying a television video signal in a mobile terminal with a display unit, said display unit having a video data display area and a user data display area, said method comprising the steps of:

a) determining in a standby mode whether said mobile terminal is set to a television mode or communication mode (Page 5 lines 18-22);

b) if said mobile terminal is set to said television mode, controlling a tuner to select a desired television channel (Page 4 lines 1-5; Page 10 lines 25-26; page 11 lines 1-2);

c) receiving a television signal over the selected television channel and separating the received television signal into said television video signal, an audio signal and synchronous signals (Page 19 lines 13-25);

e) converting said separated video signal into video data (Page 12 lines 18-27, timing control section);

and f), if said mobile terminal is set to said communication mode, storing said second user data generated in said communication mode in said memory unit (Page 7 lines 1-12, where second user data is a text message)

However, it is noted that Jang fails to disclose displaying the stored said second user data in said video data display area and user data display area of said display unit;

Art Unit: 2423

and d) scaling a size of video data to a predetermined frame size on the basis of said synchronous.

Nevertheless, in a similar field of endeavor Yamaguchi discloses displaying the stored said second user data in said video data display area and user data display area of said display unit (Figure 4A, image section 33a; Figure 4B, text message represents the second user data);

and d) scaling a size of video data to a predetermined frame size on the basis of said synchronous (Figures 4A and 4B, video image 33a is displayed on a cell phone screen where the video is formatted to fit on the display; moreover, the video image once again changes in size when a text message is received in order to show it to the viewer)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, for the purpose of allowing the user to be able to see different types of data simultaneously, which is more efficient and convenient for the user.

However, it is noted that Jang and Yamaguchi fail to disclose converting the video signal into video data of a current frame in response to a synchronous signals, storing the video data of the current frame, outputting video data of a previous frame stored in said memory unit to the video data display area of said display unit.

Nevertheless, in a similar field of endeavor Kida discloses converting said separated video signal into video data of a current frame in response to a synchronous

Art Unit: 2423

signals, storing the video data of the current frame, outputting video data of a previous frame stored in said memory unit to the video data display area of a display unit (Col. 7 lines 3-57 also exhibited on figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose storing the first user data corresponding to said selected channel in a memory unit and then outputting said first user data stored in said memory unit to said user data display area of said display unit upon completing the output of said video data frame.

Nevertheless, in a similar field of endeavor Hassell discloses storing the first user data corresponding to said selected channel in a memory unit (Paragraphs [0081] [0146]) and then outputting said first user data stored in said memory unit to said user data display area of said display unit upon completing the output of said video data frame (Paragraphs [0098] [0099] also exhibited on figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of implementing an efficient and easy to navigate interface which informs users about the content being watched.

Regarding **claim 9**, Jang and Yamaguchi disclose the display apparatus as set forth in claim 8; moreover, Jang discloses that said step e) includes the steps of:

e-1) converting said separated video signal into digital video data (Page 12 lines 22-25 also exhibited on fig 1);

e-2) storing said video data and outputting of said video data and repeating these storage and output operations (Page 19 lines 13-25; page 12 lines 18-27 timing control section).

However, it is noted that Jang and Yamaguchi fail to disclose storing said video data of said current frame in a second or third memory of said memory unit at the same time as outputting and displaying said video data of said previous frame stored in said third or second memory.

Nevertheless, in a similar field of endeavor Kida discloses storing said video data of said current frame in a second or third memory of said memory unit at the same time as outputting and displaying said video data of said previous frame stored in said third or second memory (Col. 7 lines 3-57 also exhibited on figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose outputting and displaying said first user data stored in a first memory of said memory unit upon completing the output of said video data.

Nevertheless, in a similar field of endeavor Hassell discloses outputting and displaying said first user data stored in a memory of said memory unit upon completing the output of said video data (Paragraphs [0098] [0099] figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of implementing an efficient and easy to navigate interface which informs users about the content being watched.

Regarding **claim 13**, Jang discloses a method for displaying a television video signal in a mobile terminal with a display unit, said display unit having a video data display area and a user data display area, said method comprising the steps of:

a) in a television mode, controlling a tuner to select a desired television channel (Page 4 lines 1-5; Page 10 lines 25-26; page 11 lines 1-2);

b) receiving a television video signal over the selected television channel and converting the received video signal into digital video data (Page 12 lines 22-25 also exhibited on fig 1);

d) storing video data received over said selected channel and output of said video data (Page 19 lines 13-25; page 12 lines 18-27 timing control section);

c) receiving synchronous signals (Page 11 lines 7-16);

e) determining a communication mode and second user data generated in said communication mode upon generation of a communication command at said step d) (Page 5 lines 18-22);

determine if said communication mode is to be a data communication mode , and returning to said step d) if said communication mode is ended (Page 5 lines 18-22);

g) if said communication mode is determined to be a voice communication mode at said step e), displaying a television picture in said video data display area of said display unit, blocking a television audio signal to perform a voice communication function and returning to said step d) if said communication mode is ended (Page 10 lines 1-7).

However, it is noted that Jang fails to disclose c) scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from a decoder and f) displaying a television picture in said video data display area of said display unit and said second user data in said user data display area of said display unit, respectively.

Nevertheless, in a similar field of endeavor Yamaguchi discloses c) scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from a decoder (Figures 4A and 4B, video image 33a is displayed on a cell phone screen where the video is formatted to fit on the display; moreover, the video

Art Unit: 2423

image once again changes in size when a text message is received in order to show it to the viewer)

f) displaying a television picture in said video data display area of said display unit and said second user data in said user data display area of said display unit, respectively (Figure 4B, where the first display area corresponds to the video image section 33a and second user data is the text message displayed on the bottom part of the display).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, for the purpose of allowing the user to be able to see different types of data simultaneously, which is more efficient and convenient for the user.

However, it is noted that Jang and Yamaguchi fail to disclose storing video data of a current frame in memory, outputting video data of a previous frame stored in said memory to video data display area of display unit in a frame period.

Nevertheless, in a similar field of endeavor Kida discloses storing video data of a current frame in memory, outputting video data of a previous frame stored in said memory to video data display area of display unit in a frame period (Col. 7 lines 3-57 also exhibited on figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a

Art Unit: 2423

temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose storing first user data and then outputting said first user data stored in said memory to said user data display area of said display unit upon completing the output of said video data.

Nevertheless, in a similar field of endeavor Hassell discloses storing first user data and then outputting said first user data stored in said memory to said user data display area of said display unit upon completing the output of said video data (Paragraphs [0098] [0099] also exhibited on figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of implementing an efficient and easy to navigate interface which informs users about the content being watched.

Regarding **claim 15**, Jang discloses a mobile terminal for performing a television mode and a communication mode, comprising:

control means for generating a plurality of commands for execution of said television mode and communication mode (Page 5 lines 18-22; Page 4 lines 1-5; Page 10 lines 25-26; page 11 lines 1-2),

and a plurality of commands for execution of said television mode or an OSD mode as a display mode when said communication mode occurs in said television mode (Page 5 lines 18-22);

a tuner for receiving a television signal of a selected channel (Page 4 lines 1-5; Page 10 lines 25-26; page 11 lines 1-2);

a decoder for decoding the television signal received by said tuner to separate it into a video signal, an audio signal and synchronous signals (Page 11 lines 12-16 also exhibited on fig 1);

video processing means for, in said television mode, converting said video signal from said decoder into digital video data, processing and storing the converted digital video data (Page 12 lines 22-25);

and, if said communication mode occurs in said television mode and said television mode is set as said display mode, blocking said audio signal from said decoder and processing second user data generated in said communication mode from said control unit at the same time as performing said television mode and, if said communication mode occurs in said television mode and said OSD mode is set as said display mode, blocking the output of said decoder and processing said second user data (Page 10 lines 3-5);

display means being capable of displaying said frame video data on said display area and displaying said second user data on a desired position of said display area on top of displayed said frame video data if said communication mode occurs in said television mode and said OSD mode is set as said display mode (Page 12 lines 9-13)

However, it is noted that Jang fails to disclose a first user data corresponding to a television picture being displayed; a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder; and display means having a display area comprising first and second display areas, said display means being capable of: displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode; displaying said second user data from said video processing means in said first and second display areas in said communication mode; displaying said frame video data and said second user data in said first and second display areas respectively if said communication mode occurs in said television mode and said television mode is set as said display mode.

Nevertheless, in a similar field of endeavor Yamaguchi discloses a first user data corresponding to a television picture being displayed (Figures 4A and 4B; reception signal strength);

a format scaler for scaling a size of said video data to a predetermined frame size on the basis of said synchronous signals from said decoder (Figures 4A and 4B, video image 33a is displayed on a cell phone screen where the video is formatted to fit on the display; moreover, the video image once again changes in size when a text message is received in order to show it to the viewer);

and display means having a display area comprising first and second display areas, said display means being capable of:

displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode (Figure 4A, where the first display area corresponds to the video image section 33a; and the second display area corresponds to the top portion showing a battery level and reception signal strength which represent the first user data),

displaying said second user data from said video processing means in said first and second display areas in said communication mode (Figure 4B, text message represents the second user data; which modifies the other display areas in order to be displayed on the screen),

displaying said frame video data and said second user data in said first and second display areas respectively if said communication mode occurs in said television mode and said television mode is set as said display mode (Figure 4A, where the first display area corresponds to the video image section 33a; the second display area corresponds to the top portion showing a battery level and reception indicator which represent the first user data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, for the purpose of allowing the user to be able to see different types of data simultaneously, which is more efficient and convenient for the user.

However, it is noted that Jang and Yamaguchi fail to disclose processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period.

Nevertheless, in a similar field of endeavor Kida discloses processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period (Col. 7 lines 3-57 also exhibited on figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Yamaguchi by specifically providing the elements mentioned above, as taught by Kida, for the purpose of implementing a temporary memory that can compensate for a difference in a rate of flow of data or any delays that have previously occurred.

However, it is noted that Jang, Yamaguchi and Kida fail to disclose outputting stored video data and then outputting said first user data.

Nevertheless, in a similar field of endeavor Hassell discloses outputting stored video data and then outputting said first user data (Paragraphs [0098] [0099] also exhibited on figures 8 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi and Kida by specifically providing the elements mentioned above, as taught by Hassell, for the purpose of implementing an efficient and easy to navigate interface which informs users about the content being watched.

Art Unit: 2423

Regarding **claim 17**, Jang, Yamaguchi Kida and Hassell disclose the display apparatus as set forth in claim 13; moreover, Jang discloses a voice communication mode and determining if communication mode is determined to be a voice communication mode (Page 3 lines 17-25 and page lines 1-19)

However, it is noted that Jang fails to disclose displaying said second user data in said user data display area of said display unit.

Nevertheless, in a similar field of endeavor Yamaguchi discloses displaying said second user data in said user data display area of said display unit (Figure 4B, text message represents the second user data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang by specifically providing the elements mentioned above, as taught by Yamaguchi, or the purpose of allowing the user to be able to see different types of data simultaneously, which is more efficient and convenient for the user.

Art Unit: 2423

8. **Claims 3, 5, 6, 7, 10, 11, 12, 14 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang, Yamaguchi, Kida and Hassell further in view of Barile (Pub No US 2002/0093531). Hereinafter, referenced as Barile.

Regarding **claim 3**, Jang, Yamaguchi Kida and Hassell disclose the display apparatus as set forth in claim 2; however, it is noted that Jang, Yamaguchi Kida and Hassell fail to disclose that said video processing means further includes an on-screen display (OSD) controller for designating, copying and displaying a desired area of said user data stored in said first memory.

Nevertheless, in a similar field of endeavor Barile discloses that said video processing means further includes an on-screen display (OSD) controller for designating, copying and displaying a desired area of said user data stored in said first memory (Paragraph [0046]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi Kida and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of expanding the capabilities of the device allowing the users to capture images, which expands the marketability if the device attracting more future customers.

Regarding **claim 5**, Jang, Yamaguchi Kida and Hassell disclose the display apparatus as set forth in claim 2; however, it is noted that Jang, Yamaguchi Kida and Hassell fail to disclose that said memory controller is adapted to output video data of a

Art Unit: 2423

frame being displayed on said display means as a still picture in response to a capture key input; and said control means is adapted to access said video data being output as said still picture.

Nevertheless, in a similar field of endeavor Barile discloses that said memory controller is adapted to output video data of a frame being displayed on said display means as a still picture in response to a capture key input (Paragraph [0046]); and said control means is adapted to access said video data being output as said still picture (Paragraph [0020], the processor controls and coordinates the functioning of the mobile terminal and the data stored in memory).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi Kida and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of expanding the capabilities of the device allowing the users to capture images, which expands the marketability if the device attracting more future customers.

Regarding **claim 6**, Jang, Yamaguchi Kida and Hassell disclose the display apparatus as set forth in claim 2; however, it is noted that Jang, Yamaguchi Kida and Hassell fail to disclose that said memory controller is adapted to rotate and output a picture being displayed on said display means in response to a rotate key input.

Nevertheless, in a similar field of endeavor Barile discloses that said memory controller is adapted to rotate and output a picture being displayed on said display means in response to a rotate key input (Paragraph [0035]).

Art Unit: 2423

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi Kida and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of providing capabilities to the user to interact with the display with different views which adds comfort and flexibility to the device.

Regarding **claim 7**, Jang, Yamaguchi, Kida, Hassell and Barile disclose the display apparatus as set forth in claim 6; moreover, Barile discloses that said memory controller is adapted to scale up and output said picture (Paragraph [0035] figs 4-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi, Kida, and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of providing capabilities to the user to interact with the display with different views which adds comfort and flexibility to the device, introducing an enhanced interaction with the device.

Regarding **claims 10 and 11**, Jang, Yamaguchi, Kida, Hassell and Barile disclose all the limitations of claims 10 and 11; therefore, claims 10 and 11 are rejected for the same reasons as in claim 5 and 6, respectively.

Art Unit: 2423

Regarding **claim 12**, Jang, Yamaguchi, Kida, Hassell and Barile disclose the method as set forth in claim 11; moreover, Barile discloses that the step of outputting the currently displayed picture if the rotation is made by 90 degree or 270 degree or substantially 90 degree or substantially 270 degree (paragraph [0035], the user can turn the device sideways by 90 degrees and view a larger image) and the step of scaling up said picture (Paragraph [0035] figs 4-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi, Kida and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of providing capabilities to the user to interact with the display with different views which adds comfort and flexibility to the device, introducing an enhanced interaction with the device.

Regarding **claim 14**, Jang, Yamaguchi, Kida and Hassell disclose steps a, b, c, d, f, g and h; therefore these steps are rejected for the same reason as in claim 13.

However, it is noted that Jang, Yamaguchi, Kida and Hassell fail to disclose that upon generation of a screen adjustment command at said step d), rotating currently displayed picture and displaying the resulting picture on said display unit at a full screen size.

Nevertheless, in a similar field of endeavor Barile discloses that that upon generation of a screen adjustment command at said step d), rotating currently displayed picture and displaying the resulting picture on said display unit at a full screen size

Art Unit: 2423

(Paragraph [0035]) and the step of scaling up said picture (Col. 4 lines 29-30; col. 5 lines 10-20 also exhibited on fig 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi, Kida and Hassell by specifically providing the elements mentioned above, as taught by Barile, for the purpose of providing capabilities to the user to interact with the display with different views which adds comfort and flexibility to the device.

Regarding **claim 18**, Jang, Yamaguchi, Kida, Hassell and Barile disclose the method as set forth in claim 14; moreover, Jang discloses that step h) further includes the steps of:

g-l) displaying said second user data on a desired position of the displayed television picture in an OSD manner, if said communication mode is determined to be a voice communication mode (Page 12 lines 9-13).

Art Unit: 2423

9. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jang, Yamaguchi, Kida, Hassell and Barile further in view of Ng (Patent No US 6,681,285). Hereinafter, referenced as Ng.

Regarding **claim 4**, J Jang, Yamaguchi, Kida and Hassell disclose the display apparatus as set forth in claim 3; however, it is noted that Jang, Yamaguchi Kida and Hassell fail to disclose that said video processing means further includes an Inter Integrated Circuit (I2C) controller for transferring channel control data from said control means to said tuner in an I2C communication manner.

Nevertheless, in a similar field of endeavor Ng discloses that said video processing means further includes an Inter Integrated Circuit (I2C) controller for transferring channel control data from said control means to said tuner in an I2C communication manner (Col. 2 lines 24-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang and Jang, Yamaguchi Kida and Hassell by specifically providing the elements mentioned above, as taught by Ng, for the purpose of promoting robustness and interoperability, by implementing a computer bus that allows simplicity and low manufacturing cost.

Art Unit: 2423

10. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jang, Yamaguchi, Kida, Hassell and Barile further in view of Yui (Patent No US 6,885,406). Hereinafter referenced as Yui.

Regarding **claim 16**, Jang, Yamaguchi, Kida, Hassell and Barile disclose the terminal as set forth in claim 14; moreover, the limitations of claim 2 are included in claim 16; therefore those limitations are rejected for the same reasons as in claim 2.

However, it is noted that Jang, Yamaguchi, Kida, Hassell and Barile fail to disclose outputting the stored wall paper data.

Nevertheless, in a similar field of endeavor Yui discloses outputting the stored wall paper data (Col. 8 lines 11-17, any display system can display a background retrieved from memory).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jang, Yamaguchi, Kida, Hassell and Barile by specifically providing the elements mentioned above, as taught by Yui, for the purpose of enhancing the appearance of the interface.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2423

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. O. M./
April 22, 2009

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423